

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended): ~~Process~~A process for obtaining a heating fluid to be used as an indirect heat source for carrying out endothermic reactions, wherein said heating fluid ~~and the products resulting from said endothermic reactions are totally independent one from the others comprising~~does not comprise products resulting from said endothermic reactions, comprising the steps of:

- feeding a flow comprising hydrocarbons and a gas flow comprising oxygen to a combustor, wherein such flows are suitably compressed;
- burning said hydrocarbons in presence of said oxygen in ~~the~~said combustor, thus obtaining a high temperature fluid comprising carbon dioxide and oxygen; and
~~wherein the process further comprises the step of~~ feeding a flow comprising water~~[[,]]~~ to said high temperature fluid and/or to said combustor.

2. (currently amended): ~~Process~~The process according to claim 1, further comprising feeding said water in an amount comprised between 0.1 and 0.7 times ~~the~~said flow comprising oxygen.

3. (currently amended): ~~Process~~The process according to claim 1, wherein said flow comprising water is fed to said high temperature fluid and/or to said combustor as vapour obtained through evaporation of a water flow ~~at a predetermined pressure~~.

4. (currently amended): ~~Process~~ The process according to claim 1, wherein said flow comprising water is fed into said combustor in the form of vapour together with said flow comprising oxygen.

5. (currently amended): ~~Process~~ The process according to claim 4, further comprising the steps of:

- feeding ~~at a predetermined pressure~~ said flow comprising water into ~~the~~ said flow comprising oxygen upstream of said combustor;

- heating the so-obtained flow of water and oxygen in such a way to let ~~the~~ said water at least partially evaporate and obtain a flow comprising oxygen and water vapour.

6. (currently amended): ~~Process~~ The process according to claim 4, further comprising the steps of:

- heating said flow comprising water to obtain a suitably heated flow comprising water;
- feeding ~~at a predetermined pressure~~ ~~the~~ said suitably heated flow comprising water into ~~the~~ said flow comprising oxygen upstream of the combustor, in such a way to let ~~the~~ said water at least partially evaporate and obtain a flow comprising oxygen and water vapour.

7. (currently amended): ~~Process~~ A process for carrying out hydrocarbon reforming reactions in an exchanger type reformer, comprising the steps of:

- feeding a gas flow comprising hydrocarbons and water vapour in a reaction space (25) comprising catalyst in said exchanger type reformer;

- feeding a heating fluid in a space (26) adjacent to said reaction space (25) in said exchanger type reformer;

- reacting in a catalytic way ~~the~~said gas flow comprising hydrocarbons by indirect heat exchange with ~~the~~said heating fluid, thus obtaining a gas flow comprising hydrogen;

wherein said heating fluid ~~comprises water~~does not comprise said gas flow comprising hydrogen and said heating fluid is obtained through the process for obtaining a heating fluid according to claim 1.

8. (cancelled).

9. (currently amended): ~~Process~~The process according to claim ~~8~~9, further comprising ~~the~~a step of cooling down ~~the~~said heating fluid leaving the exchanger type reformer by indirect heat exchange with a flow comprising oxygen and/or water fed to said combustor.

10. (cancelled).